

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (Original) Method of controlling data traffic in a telecommunications network (150) using a statistical model (D-BIND, S-BIND) of the traffic transmitted by the network (150) and a Gaussian distribution of the data bit rate, in which method a value  $(\mu, \sigma)$  characteristic of said Gaussian distribution is weighted by a parameter  $\gamma$  varying as a function of the intensity of the variations, also known as the burstiness, of the traffic processed by the network (150) and said weighted value  $(\mu', \sigma)$  is used to evaluate the traffic in the network, which method is characterized in that the weighting parameter  $\gamma$  is defined by means of an average value  $\lambda_{avg}$  of the data bit rate and a maximum value  $\lambda_{peak}$  of the data bit rate over a given period.

2. (Original) Method according to claim 1 characterized in that the weighting parameter  $\gamma$  is defined as the ratio of the average value  $\lambda_{avg}$  of the data bit rate to the maximum value  $\lambda_{peak}$  of the data bit rate:

$$\gamma = \frac{\lambda_{avg}}{\lambda_{peak}}$$

3. (Currently Amended) Method according to claim 1 ~~or claim 2~~ characterized in that the average value  $\lambda_{avg}$  of the data bit rate is measured over a predetermined period during which the maximum value  $\lambda_{peak}$  of the data bit rate is determined.

4. (Currently Amended) Method according to claim 2 ~~or claim 3~~ characterized in that the average value  $\mu$  of the Gaussian distribution is weighted, for example by means of a formula such as:

$$\mu' = (1 - \gamma)(\mu - \lambda_{avg}) + \lambda_{avg}$$

5. (Currently Amended) Method according to ~~any one of the preceding claims~~ claim 1 characterized in that a model of the data traffic is used involving pairs of values

$$\{(R_k, I_k) | k = 1, \dots, p\}$$

in which  $I_k$  is a interval,  $p$  is a variable generally having a value from 4 to 8 and  $R_k$  is the maximum data bit rate that a given data stream can send during that interval  $I_k$  such that, the maximum data bit rate  $R_k$  for the stream  $j$  is defined as follows:

$$R_k = \max_{0 \leq t} \left( \frac{A_j[t, t + I_k]}{I_k} \right)$$

where  $A_j[t_1, t_2]$  represents the total number of bits sent by the data stream ( $j$ ) concerned between the times  $t_1$  and  $t_2$ .

6. (Original) Method according to claim 5 characterized in that a data stream is modeled by a series of positive real numbers

$$\{X_{i1}, X_{i2}, \dots, X_{iN}\}$$

obtained from a function  $b(t)$  generated by means of pairs of values

$\{(R_k, I_k) | k = 1, \dots, p\}$ , for example in accordance with a formula such as:

$$b(t) = \frac{R_k I_k - R_{k-1} I_{k-1}}{I_k - I_{k-1}} (t - I_k) + R_k I_k, \quad I_{k-1} \leq t \leq I_k$$

7. (Original) Method according to claim 6, characterized in that a confidence level  $\varepsilon$  is defined using a random variable  $S_k$  specific to the distribution of the data stream bit rate concerned during an interval  $I_k$  by associating with it a probability density function  $s_k(a)$  defined as follows:

$$S_k(a) = \text{prob} \left( \frac{A_j[t, t + I_k]}{I_k} \leq a \right), \quad \forall t \geq 0$$

and then defining the value  $R_k$  for each interval  $I_k$  as follows:

$$\int_0^{R_k} S_k(t) dt = \varepsilon$$

where  $0 < \varepsilon \leq 1$ .

8. (Currently Amended) Method according to ~~any one of the preceding claims~~ claim 1 characterized in that data traffic control is used to decide whether to admit into the network a data stream relating, for example, to multimedia information such as a conversation, a videoconference, a picture and/or a sequence of pictures coded in accordance with the MPEG protocol, for example.

9. (Original) Device for controlling data traffic in a telecommunications network (150) using a statistical model (D-BIND, S-BIND) of the traffic transmitted by the network (150) and a Gaussian distribution of the data bit rate, which device is characterized in that it comprises means for executing a method according to any one of the preceding claims to weight a value ( $\mu$ ,  $\sigma$ ) characteristic of said Gaussian distribution by a parameter  $\gamma$  varying as a function of the intensity of the variations, also known as the burstiness, of the traffic processed by the network (150) and said weighted value ( $\mu'$ ,  $\sigma$ ) is used to evaluate the traffic in the network.